

MEMORANDUM OF AGREEMENT  
BETWEEN  
THE DIRECTORATE OF PUBLIC WORKS  
AND  
KELLER ARMY COMMUNITY HOSPITAL, PREVENTIVE MEDICINE & WELLNESS  
DEPARTMENT

SUBJECT: Protocol for Mold Investigations for Family Housing

1. References:

- a. TG-278, Industrial Hygiene/Preventive Medicine Mold Assessment Guide, February 2002.
- b. TG-277, Army Facilities Management Information Document on Mold Remediation Issues, February 2002.
- c. EPA 402-K01-001, Mold Remediation in Schools and Commercial Buildings, March 2001.

2. Purpose. To provide guidance and procedures to be used by Directorate of Public Works (DPW) and Keller Army Community Hospital (KACH), Preventive Medicine & Wellness (PM&W) personnel who conduct Mold Indoor Air Quality Investigations of Family Housing Units.

3. Problem. There has been an increased level of concern among occupants of government housing units on West Point in regards to indoor mold exposure. These concerns deal with the possible health effects of exposure to include, but not limited to, allergic reactions. The structure and design of many of the installation's older buildings, combined with their plumbing and ventilation systems, inadvertently creates an environment conducive to the growth of mold. These factors are compounded by the region's humid climate. Leaks or spills, which may occur in these units, are also contributing factors.

4. Scope. Cooperation between KACH and DPW to determine resolutions to issues presented by mold which will lead to effective solutions. This allows the U.S. Army's needs to be met while minimizing costs and potential liabilities. The consultation of health service professionals and the expertise of the engineers represent the best use of government resources in order to mitigate the mold problem and address concerns of housing occupants.

5. Understandings, agreements and support and resource needs:

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a. Family Housing:

(1) All mold complaints from personnel residing in Family Housing will be referred to Housing and Public Works, (845) 938-4500. To place work orders for an initial investigation of the housing unit call, ext. 2316/4031. For complaints call the Customer Service Representative at ext. 4407.

(2) The initial investigation should follow the general guidance outlined in this document. However, specific procedures will vary on a case by case basis according individual circumstances and recommendations made by Preventive Medicine.

(3) Investigation Procedures for Family Housing Personnel:

(a) Upon receipt of a complaint, schedule an appointment with the quarters' occupants to conduct the initial investigation.

(b) Determine the location of mold growth. Distinguish between actual mold growth and dust accumulation. Inspect the entire Heating and Air Conditioning (HVAC) system to include supply and return grills, HVAC unit, filters and duct work. Inspect for water leaks throughout the quarters.

(c) Determine the temperature and humidity of the air throughout the quarters. These tests are only valid if the HVAC system is operational and all doors and windows are closed during testing. Recommended humidity levels are 30-60%. Preferably the humidity should not exceed 50%.

(d) If mold is found, determine where mold is growing and assess the cause of growth. (Example: water, plugged drain, leaking pipes, high humidity levels, flooding, etc.). Place work orders to fix any identified causes. Generally, if structures, carpet, wallboard, sheet rock and other porous material have been wet for more than 48 hours, it should be assumed that mold growth has begun. If less than 48 hours, it is advisable to thoroughly dry out the material and the materials/structures should be monitored over the next 2-3 weeks to determine whether mold has returned or continued to grow.

(e) If mold remediation is warranted, refer to USACHPPM TG-277, Army Facilities Management Information Document on Mold Remediation Issues, February 2002 for guidance. The primary concern is to prevent any exposure to quarters' occupants during all remediation efforts. This may require temporary relocation of occupants during remediation. Current criteria recommend remediation procedures be based upon the square footage and/or type material to be remediated. In cases where mold growth is visible or porous material has been wet for more than 48 hours, remediation and repairs should begin immediately and should not be delayed for sampling.

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(f) Periodically, there may be mold investigations that require additional resources and/or expertise not available to Family Housing personnel. When the initial investigation indicates potential health related problems; Family Housing should contact Preventive Medicine. PM will do a preliminary review to determine if a medical investigation is warranted. Housing occupants may be required to provide medical documentation to Preventive Medicine, when requested, as part of the investigation.

b. Preventive Medicine Services:

(1) Preventive Medicine Service will assist with required inspection when requested by Family Housing Office. This inspection should be conducted by Family Housing initially and Preventive Medicine personnel once an occupant has a health concern. PM will respond in a consultant role only and will refer all complaints by housing occupants to Family Housing or their Primary Care Provider.

(a) Conduct visual inspection of complete HVAC system.

(b) Conduct temperature, humidity and carbon dioxide survey in quarters.

(c) Conduct health interview with occupants to document symptoms and prior diagnosis of an allergy or disease that is or may be associated with mold exposure. When indicated, occupants will be referred to their Primary Care Provider for medical screening.

(d) Determine if sampling is required.

(e) If required, conduct the necessary sampling.

6. Training:

a. Family Housing Inspectors should have formal institutional training in mold remediation hazards, personal protection and work practices.

7. Equipment requirements: Electronic measuring devices for temperature and humidity.

8. Funding:

a. Family Housing will provide funding for all sampling conducted as part of an investigation on their behalf.

b. Family Housing will be billed for mold analysis conducted on samples taken from housing units.

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9. For additional information contact the Environmental Health section at 938-5832.

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Engineer  
Director of Public Works

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COL, MC  
Commanding

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